

REMARKS

The Office action of 3 October 2006 (Paper No. 20060925) has been carefully considered.

Claims 1, 5, 8, 11, 15 and 18 are being amended. Thus, claims 1 thru 20 are pending in the application.

In paragraph 4 of the Office action, the Examiner rejected claims 1 thru 20 under 35 U.S.C. §103 for alleged unpatentability over Jeong *et al.*, U.S. Patent No. 5,218,489 in view of “Official Notice”, and further in view of Gedl *et al.*, U.S. Patent No. 6,185,359. In paragraph 5 of the Office action, the Examiner rejected claims 1 thru 4 and 10 thru 14 under 35 U.S.C. §103 for alleged unpatentability over Jeong *et al.* ‘489 in view of Choi, U.S. Patent No. 5,519,549. In paragraph 6 of the Office action, the Examiner rejected claims 1 thru 20 under 35 U.S.C. §103 for alleged unpatentability over Gedl *et al.* ‘359 in view of “Official Notice”. For the reasons stated below, it is submitted that the invention recited in the claims, as now amended, is distinguishable from the prior art cited by the Examiner so as to preclude rejection under 35 U.S.C. §103.

In rejecting independent claim 1, the Examiner cites Jeong *et al.* ‘489 as disclosing a video signal processing circuit having an envelope detector, the Examiner citing the envelope detector 200 of Figures 2 and 3 of Jeong *et al.* ‘489. The Examiner then cites the comparator 300, second amplifier 450 and microcomputer 400 of Figure 3 of Jeong *et al.* ‘489 as corresponding to the claimed level variation switching circuit “for changing

an envelope level of the FM video signal (the video signal detected by the reproducing head HD and that supplies to the comparator (300) then to microcomputer (400)” (quoting from the sentence bridging pages 2 and 3 of the Office action.

At the bottom of page 3 of the Office action, the Examiner admits that the invention of claim 1 differs from Jeong *et al.* ‘489 “in that the claim further requires ON/OFF switching control of the level variation switching circuit is executed in response to a control data input from the microprocessor” (quoting from the last three lines on page 3 of the Office action). The Examiner then cites (on page 4 of the Office action) Gedl *et al.* ‘359 as allegedly disclosing “an envelope detector to detect the envelopes of the color television signals, reproduced by means of one of the two magazine heads” (quoting from page 4, lines 1-2 of the Office action). The Examiner further states that “Gedl further discloses the microcomputer 19 has an output connected to a control input 52 of the head switching stage 49” (quoting from page 4, lines 6-7 of the Office action). In the latter regard, the Examiner cites Figure 1 and column 8, lines 32-56 of Gedl *et al.* ‘359.

Nevertheless, there is still a difference between the claimed invention and the disclosure of Gedl *et al.* ‘359. Specifically, the last paragraph of claim 1 recites the step of “connecting an input of the level variation switching circuit to a control output of a microprocessor”, whereas, in contrast, Gedl *et al.* ‘359 discloses the connection of a control input 52 of a head switching stage 49 to an output of the microcomputer 19 (*see* page 4, lines 6-7 of the Office action). In that regard, the head switching stage 49 of Gedl *et al.* ‘359 is not a “level variation switching circuit” as recited in the last paragraph of

claim 1. In fact, rather than varying the envelope level of an FM video signal, the head switching stage 49 of Gedl *et al.* '359 merely changes "the switching state of the SP/LP head switching stage 49" (quoting from column 8, line 41 of Gedl *et al.* '359). Furthermore, there is no mention whatsoever in the portion of Gedl *et al.* '359 cited by the Examiner (that is, column 8, lines 32-56 of the patent) of the use of a level variation switching circuit to change an envelope level of an FM video signal, as recited in claim 1 of the present application.

Based on the latter analysis, it is highly doubtful that one of ordinary skill in the art, as of the date of the invention, would have been motivated or instructed by Jeong *et al.* '489 to seek and obtain the disclosure of Gedl *et al.* '359 in order to control the operation of a level variation switching circuit. The latter observation is reenforced by the fact that, as discussed above, Gedl *et al.* '359 does not at all disclose a level variation switching circuit, or the controlling of an input to a level variation switching circuit so as to selectively change the envelope level of an FM video signal.

In accordance with the distinction between the invention and the cited prior art, as discussed above, independent claims 1, 5, 8, 11, 15 and 18 are being amended to recite that the envelope level of the FM video signal is selectively changed by selectively controlling operation of the level variation switching circuit. As mentioned above, this feature of the present invention is not disclosed in or suggested by the prior art cited by the Examiner.

Turning to consideration of the rejection of claim 5, as set forth on pages 5 and 6 of the Office action, the arguments above apply equally to claim 5. In addition, it is noted that, in rejecting claim 5, the Examiner alleges that elements D2, R7 and C5 within the waveform shaper 230 of Figure 3 of Jeong *et al.* '489, as well as the band pass filter 220 of Figure 4 thereof, receive an FM video signal and detect "a peak value of the FM video signal" (see page 6, lines 1-4 of the Office action). In that regard, the Examiner cites column 1, lines 52-67; column 2, lines 47-53; column 3, lines 27-55; and claims 1-12 of the patent. However, as indicated at column 2, lines 47-53 of Jeong *et al.* '489, the elements cited by the Examiner in Figures 3 and 4 of the patent do not detect a peak value of an FM video signal, as recited in claim 5, but rather they merely perform waveform shaping. In that regard, note that Jeong *et al.* '489 (at column 2, line 51) refers to element 230, which contains the diode D2, the capacitor C5 and the resistor R7 cited by the Examiner, as a waveform shaper. Thus, detection of the peak value of an FM video signal, as recited in claim 5, is not disclosed and/or suggested by Jeong *et al.* '489, as alleged by the Examiner.

The latter argument also applies to independent claims 8 and 18, which are discussed by the Examiner on pages 7 and 8 of the Office action. Specifically, at page 7, lines 10-17 of the Office action, with regard to the rejection of claims 8 and 18, the Examiner again refers to the elements D2, R7 and C5 of waveform shaper 230, as well as band pass filter 220 of Figures 3 and 4, respectively, from Jeong *et al.* '489 as detecting a peak value of an FM video signal. As stated above, the disclosure of Jeong *et al.* '489 does not set forth or suggest detection of a peak value of an FM video signal, but rather

the elements cited by the Examiner merely perform waveform shaping.

Furthermore, referring to page 7, lines 18-20 of the Office action, contrary to the allegation set forth at that portion of the text of the Office action, there is no disclosure or suggestion in Jeong *et al.* '489 of the connection of a level switch to an output of a peak detector since, as discussed above, Jeong *et al.* '489 does not disclose or suggest elements for detecting the peak of an FM video signal.

On page 8 of the Office action, with respect to claims 8 and 18, the Examiner admits that Jeong *et al.* '489 fails to disclose a resistance element having a first terminal connected to the output of a peak detector and a second terminal connected to a switching control element. However, the Examiner takes "Official Notice" that "it is well known in the art and it is a designer choice at the time the invention was made to add a resistor at the output terminal of the peak detector in the level varying switching circuit" (quoting from page 8, lines 16-18 of the Office action). However, in taking such "Official Notice", it is incumbent upon the Examiner to cite some evidence in support of the assertions set forth within the context of an "Official Notice". In this case, as well as in various other cases of the taking of "Official Notice" throughout the Office action, the Examiner has not provided any evidence in support of the "Official Notice" taken by the Examiner.

At the top of page 9 of the Office action, the Examiner states that the basis for rejection of claim 11 is the same as discussed earlier with respect to claims 1, 2 and 3.

Thus, for the same reasons set forth above relative to the rejection of independent claim 1, it is respectfully submitted that the rejection of independent claim 11 is improper, and should be withdrawn.

With respect to the rejection of dependent claims 2 and 3, both alone and as applied to the rejection of independent claim 11, on page 4 of the Office action, the Examiner states that Jeong *et al.* '489 "discloses in a microcomputer 400 the output signal is stepped up or down based on the duty ratio difference" (quoting from page 4, lines 18-19 of the Office action). However, it should be noted that, the microcomputer 400 does not provide an output signal which results in level variation, but even if it does, such level variation is not based on SP mode information and SLP mode information, as recited in dependent claims 2 and 3, as well as in dependent claims 9, 10, 12, 19 and 20.

In paragraph 5 on pages 9-11 of the Office action, the Examiner rejects claims 1 thru 4 and 10 thru 14 under 35 U.S.C. §103 based on the disclosures of Jeong *et al.* '489 and Choi '549. The arguments set forth above relative to Jeong *et al.* '489 apply equally to this rejection of claims 1 thru 4 and 10 thru 14.

With respect to the citation of Choi '549, the Examiner asserts that Choi '549 discloses the turning on and off of transistors to change a needed voltage level (*see* page 11, lines 11-12 of the Office action). However, the Examiner fails to disclose where, in Jeong *et al.* '489, there is any motivation or instruction which would cause a person of ordinary skill in art, at the time of invention, to seek and obtain the disclosure of Choi

‘549, and to incorporate that disclosure into a modification of the disclosure of Jeong *et al.* ‘489.

In the latter regard, the Examiner states that, “in light of the teaching in Choi it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an ON/OFF switching circuit in order to change the speed” (quoting from page 11, lines 12-14 of the Office action). However, it should be noted that no change in speed is recited in independent claim 1. Thus, the turning on and off of transistors in Choi ‘549 in order to accomplish a change in speed is irrelevant with respect to the recitation of independent claim 1.

The same arguments set forth above apply equally to the rejection of claims 11 thru 14 based on Jeong *et al.* ‘489 and Choi ‘549. In that regard, referring to page 9, line 12 of the Office action (that is, the first sentence of paragraph 5 of the Office action), it is believed that the Examiner intended to reject claims 11 thru 14, rather than claims 10 thru 14, under 35 U.S.C. §103 based on Jeong *et al.* ‘489 in combination with Choi ‘549, since claim 10 is a dependent claim (depending from claim 5), and preceding independent claim 5 is not rejected based on Jeong *et al.* ‘489 alone or Jeong *et al.* ‘489 in combination with Choi ‘549.

In paragraph 6 on page 12 of the Office action, the Examiner rejects claims 1 thru 20 under 35 U.S.C. §103 based on the combination of Gedl *et al.* ‘359 in view of “Official Notice”. In that regard, in the last paragraph on page 12 of the Office action,

the Examiner alleges that Gedl *et al.* '359 discloses connecting an input of a level variation switching circuit to a control output of a microprocessor so that ON/OFF switching control of the level variation switching circuit is executed in response to a control data input from a microprocessor, the Examiner citing Figure 1 and column 8, lines 32-56 of Gedl *et al.* '359. However, a review of the cited portion of Gedl *et al.* '359 fails to reveal any control of a level variation switching circuit by a microprocessor. The most that is disclosed in Gedl *et al.* '359 is the use of a microprocessor output to control a head switching stage 39 which merely switches between switching states, but does not selectively control the operation of a level variation switching circuit so as to selectively change the envelope level of an FM video signal, as claimed.

Furthermore, with respect to the citation of "Official Notice" by the Examiner, as stated above, the Examiner does not provide any evidence, in the form of citation to other references, in support of the assertions taken as "Official Notice".

With respect to the rejection of the various independent claims based on the combination of Gedl *et al.* '359 and "Official Notice", the arguments set forth above apply equally to those claims.

Similarly, with respect to the rejection of the various dependent claims based on the combination of Gedl *et al.* '359 and "Official Notice", the arguments set forth above relative to those dependent claims apply equally to this rejection.

To summarize, the various rejections set forth in the Office action are based on the presumption that the various cited references disclose or suggest the various elements, functions and method steps recited in the claims. However, as discussed above, not all of the elements, functions or method steps recited in the independent claims (as well as the dependent claims) of this application are disclosed in or suggested by the references cited by the Examiner.

Furthermore, with respect to the allegation of obviousness, the Office action fails to sat forth an indication as to where, in the primary references, there is sufficient instruction or motivation to enable a person of ordinary skill in the art to seek the disclosures of the secondary references, and to incorporate those disclosures into a modification of the disclosure of the primary reference.

For the latter reasons, it is submitted that the rejections under 35 U.S.C. §103 are improper, and should be withdrawn.

In view of the above, it is submitted that the claims of this application are in condition for allowance, and early issuance thereof is solicited. Should any questions remain unresolved, the Examiner is requested to telephone Applicant's attorney.

No fee is incurred by this Amendment.

Respectfully submitted,



Robert E. Bushnell,
Attorney for the Applicant
Registration No.: 27,774

1522 "K" Street N.W., Suite 300
Washington, D.C. 20005
(202) 408-9040

Folio: P56349
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